Section 304-B of Indian Penal Code having regard to presumptive character of the offence, absence of direct connection between the death and the offender and the gravity of culpable conduct as well as the object sought to be achieved thereby. Further, there is distinction between Section 302 (Murder) and Section 304-B (dowry death) of the IPC. If charge is framed under Section 304-B, but after recording and appreciation of evidence, the case proved to be a case under Section 302, the charge can be altered and the accused can very well be punished under Section 302 and if the court finds that the case under Section 302 to be a rarest of rare cases, then the offender can very well be awarded with capital punishment.

(b) The Commission's recommendations are not binding on the Government and are only recommendatory/advisory in nature.

(c) If the case of dowry death falls within the ambit of offence of murder, then the competent court can award punishment under Section 302 of IPC.

Policy for non-conventional energy schemes

*42 SHRI M.V. MYSURA REDDY: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government have formulated any non-conventional energy policy in the country;

(b) if so, the details and the features thereof and the role of such policy in rural, tribal and remote areas of the country;

(c) whether this policy is being implemented in the country;

(d) if so, the details of funds allocated, released and actually spent on implementation of various projects in rural areas of the country during the last three years, till date, project-wise, State-wise and year-wise; and

(e) the details of non-conventional energy sources which are operational at present, alongwith the potential sources for the same, State-wise?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR): (a) and (b) No, Sir. However, an Expert Committee constituted by the Planning Commission has prepared an Integrated Energy Policy Report (IEPR) covering all sources of energy including renewable energy sources. This report has highlighted the need to maximally develop domestic supply options and diversify energy sources. It has also projected that renewables may account for 5 to 6 per cent of India's energy mix by 2031-32 and has observed that the distributed nature of renewables can provide many socio-economic benefits for the country, including its rural, tribal and remote areas.

(c) The recommendations of the IEPR are yet to be accepted by the Government. Meanwhile, the Ministry has proposed an outlay of Rs.10,460 crore for the 11th Plan period for development of new and renewable energy in the country.

(d) State-wise details of the central financial assistance provided by the Ministry under various renewable energy schemes/programmes during the last three years, *viz.*, 2004-05, 2005-06, 2006-07 are given in Statement-I. (*See* below)

(e) The renewable energy sources exploited so far in the country are solar, wind, small hydro and bio energy. Details of their estimated potential and cumulative achievements as on 30.9.2007 under different programmes are given in Statement-II (*See* below) State-wise details of the cumulative achievements are given in Statement-III.

Statement-I

State-wise details of the central financial assistance provided by the Ministry under various renewable energy schemes/programmes during the last three years, viz., 2004-05, 2005-06, 2006-07

(Rs. in crore)

Sl. No.	States/UT	Small hydro power			Biomass Power			Biomass Gasifier			Energy from Waste			Wind Power		
		2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Andhra Pradesh	1.10	3.51	0.05		0.18	0.84		0.03	0.24	0.78	0.10	7.08	3.08	0.07	
2.	Arunachal Pradesh	10.10	3.60	8.55					0.99							
3.	Assam	0.01		0.03					0.02	0.01						
4.	Bihar		0.46	6.53	0.06			0.01	0.01	0.15						
5.	Chhattisgarh		0.60					0.01	0.01							
6.	Goa															
7.	Gujarat							0.23	0.02	0.21						
8.	Haryana							0.17	0.04	0.08						
9.	Himachal Pradesh	11.71	0.89	6.64												
10	Jammu & Kashmir	3.25	10.08						0.01							
11.	Jharkhand		0.01					0.01	0.01		0.03					
12.	Karnataka			10.20	0.95			0.13	1.12	0.21				2.73	0.43	0.03
13.	Kerala	0.53	0.43	0.69												
14.	Madhya Pradesh	0.25	0.34		0.04			0.52	0.47	0.35						
15.	Maharashtra	1.01	1.05	1.61	0.24	0.01		0.25	0.19	0.30		0.03	0.07			0.03
16.	Manipur					0.00										
17.	Meghalaya	3.05	1.08	0.02					0.25							
18.	Mizoram	2.70	12.54	8.69					0.01							
19.	Nagaland	1.63	0.85	0.20					0.65	0.40						
20.	Orissa						1.00	0.03	0.01	0.04						
21.	Punjab	0.13	1.48	2.19	0.01								0.22			
22.	Rajasthan			0.00				0.32	0.02	0.12						

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
23.	Sikkim		2.70	5.24												
24.	Tamil Nadu				0.38			1.94	1.04	0.40	3.41	2.97	0.47			
25.	Tripura								0.24							
26.	Uttar Pradesh	0.01		0.05			0.50	0.32	0.08							
27.	Uttranchal	0.11	6.55	1.19					0.01							
28.	West Bengal	0.52	0.92	0.53	0.51			0.56	0.11	1.18				0.48		1.37
29.	Andaman&Nicobar															
30.	Chandigarh															
31.	Dadar&Nagar Haveli															
32.	Daman&Diu															
33.	Delhi							0.19			0.21					
34.	Lakshadweep															
35.	Pondicherry								0.08							
36.	Others				4.03	5.13	19.65				0.01			7.40	5.18	2.00
	TOTAL	36.11	47.07	52.41	6.21	5.32	21.99	4.67	5.36	3.68	4.44	3.10	7.83	13.69	5.68	3.43

(Rs. in crore)

Sl. No.	States/UT	Biomass Plants			Small Wind Energy systems			SPV including SPV pumps			Solar Thermal			Remote Village Electrification		
		2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	Andhra Pradesh	2.41	4.32	8.66					0.46	0.25	0.22	0.04	0.19			0.07
2.	Arunachal Pradesh	0.51	0.33	0.64					0.31	2.81		0.04		0.66	2.93	1.56
3.	Assam							0.20	0.50			0.00		0.23	0.32	3.47
4.	Bihar								0.09	0.23						
5.	Chhattisgarh	0.39	1.25	2.07				0.71		0.37		0.14	0.11	0.08	2.76	3.63

6.	Goa			0.01		0.21	0.26			0.13					0.01	
7.	Gujarat	1.19	2.01	3.88	0.11	0.32	0.39		0.01	1.75	0.37	0.36	1.05		0.45	
8.	Haryana	0.21	0.12	0.21					1.31	3.27	0.20	0.35	0.29			1.24
9.	Himachal Pradesh	0.07	0.06	0.10				0.88		4.91		0.02	0.14	0.15	1.60	0.65
10.	Jammu & Kashmir							1.73		2.10		0.03			0.03	
11.	Jharkhand								0.06						11.97	3.12
12.	Karnataka		3.66	0.84		0.02		1.43	3.16	2.72		0.07	0.41		0.49	
13.	Kerala	0.80	0.17	1.23					0.75							0.02
14.	Madhya Pradesh	1.47		6.64				0.25	0.03	1.24	0.03	0.01	0.05		0.28	1.77
15.	Maharashtra	2.66	2.70	2.76	1.59	2.18	1.23	0.18	0.98	2.40	0.27	0.10	0.31		2.85	8.11
16.	Manipur	0.27	0.18						0.25	0.16				0.79	3.81	5.86
17.	Meghalaya	0.12	0.16	0.16					1.55	4.25				1.76		1.36
18.	Mizoram	0.28	0.06	0.06				0.28	1.07	1.01	0.15	0.04				
19.	Nagaland	0.00	0.06	0.12					0.07	0.95						0.17
20.	Orissa	1.68	2.25	3.49					0.02	0.77	0.03			0.43	0.06	4.96
21.	Punjab	0.22	0.18	0.80					0.12	0.63	0.04					
22.	Rajasthan	0.02				0.01			2.46	3.97	0.05			1.76	2.47	0.51
23.	Sikkim	0.62	0.26	0.26				0.26		1.08	0.00		0.02			
24.	Tamil Nadu	0.31	0.36	0.01		0.02			0.72	2.43	0.04	0.35	0.10			
25.	Tripura								0.02					10.62		3.52
26.	Uttar Pradesh	1.47	0.40	0.84				1.54	1.67	1.70	0.22	0.08	0.02	0.01		
27.	Uttaranchal		0.26	0.08					2.69	12.38	0.03	0.04	0.08	0.51	1.47	3.47
28.	West Bengal	2.41	3.31	7.33		0.05	0.27	0.37	3.26	3.41	0.04		0.01	0.72	9.53	13.66
29.	Andaman & Nicobar															
30.	Chandigarh															
31.	Dadar & Nagar Haveli															
32.	Daman & Diu															
33.	Delhi										0.06		0.09			
34.	Lakshawdeep															
35.	Pondicherry							0.02	0.05	0.02						
36.	Others	4.80	6.22	11.14	1.79	0.09		2.62	5.01	1.13	5.15	22.50	10.13	10.40	0.51	
	TOTAL	21.91	28.32	51.33	3.48	2.90	2.15	10.48	26.60	56.06	6.90	24.17	13.02	28.12	41.52	57.14

Statement-II

Details of Estimated Renewable Energy Potential and Cumulative Achievements in the Country as on 30.09.2007

Sl. No.	Sources/Systems	Estimated Potential	Cumulative Achievements as on 30.9.2007
I.	**Power From Renewables**		
A.	*Grid-interactive Renewable Power*		
1.	Bio Power (Agro residues & Plantations)	16,881[1]	560.30 MW
2.	Wind Power	45,195[2]	7,660.20 MW
3.	Small Hydro Power (up to 25 MW)	15,000[3]	2,014.66 MW
4.	Cogeneration-bagasse	5,000[4]	692.33 MW
5.	Waste to Engery (Urban & Industrial)	2,700[5]	55.75 MW
6.	Solar power	—	2.12 MW
	Total (in MW)	84,776[6]	10985.36 MW
B.	*Captive/CHP/Distributed Renewable Power*		
7.	Biomass/Cogen. (non-bagasse)		59.00 MW
8.	Biomass Gasifier	—	86.53 MWeq.
9.	Energy Recovery from Waste	—	20.21 MWeq.
	Total	—	165.74 MWeq.
II.	**Remote Village Electrification**	—	3332/830 villages/hamlets
III.	**Decentralised Energy Systems**		
10.	Family Type Biogas Plants	120 lakh	39.40 lakh
11.	Solar Photovoltaic Programme		
	i. Solar-Street Lighting System	—	61,321 nos.
	ii. Home Lighting System	—	3,63,399 nos.
	iii. Solar Lantern	—	5,64,931 nos.
	iv. Solar Power Plants	—	2.18 MWp
12.	Solar Thermal Programme	—	
	i. Solar Water Heating Systems	140 million sq. m. collector area	2.00 million sq.m. collector area
	ii. Solar Cookers	—	6.17 lakh
13.	Wind Pumps	—	1180 nos.
14.	Aero-generator/Hybrid System	—	608.27 kW
15.	Solar Photovoltaic Pumps	—	7068 nos.

MW = Megawatt kW = Kilowatt, kWp = kilowatt peak, sq.m. = square metre

NOTE:—

(1) although the potential is based on surplus agro-residues, in practice there are several barriers in collection and transportation of such agro-residues to the generation site and biomass power generation units prefer to use fuel-wood for techno-economic reasons. A potential of 45,000 MWe from around 20mha of wastelands assumed to be yielding 10MT/ha/annum of woody biomass having 4000 k-cal/kg with system efficiency of 30% and 75% PLF has not been taken into account. In order to realize this potential a major inter-Ministerial initiative involving, among others, Environment & Forests, Agriculture, Rural Development, and Panchayati Raj would be required. Further, a Biomass Atlas is under preparation which is expected to more accurately assess state-wise renewable energy potential from agro-residues.

(2) Potential based on areas having wind power density (wpd) greater than 200 W/m^2 assuming land availability in potential areas @ 1 per cent and requirement of wind farms @ 12 ha/MW, not all of which may be technically feasible and economically viable for grid-interactive wind power. In line with international practice for setting up grid-interactive wind power systems on sites having wpd greater than 300W/m^2, potential would be 5000 MW. Further, preliminary surveys do not at this juncture suggest a sizeable grid-interactive offshore wind power potential.

(3) Technically feasible and economically viable hydro potential is generally accepted at 40% of the total estimated potential. Accordingly, the technically feasible and economically viable small hydropower potential could be around 6000MW.

(4) With the establishment of new sugar mills and modernization of existing ones, technically feasible potential is assessed at 5000 MWe, not all of which may be economically viable. Furthermore, several sugar companies/cooperatives are unable to develop bankable projects on account of their financial and liquidity positions.

(5) With expansion of urban population post census 2001, current technically feasible municipal waste-to-energy potential is assessed at 1700 MWe, not all of which may be economically viable. However, subsidy disbursement under the municipal waste to energy programme had been kept in abeyance on the orders of the Supreme Court in the case of a PIL, in May 2005. This stay has been vacated in May 2007 for setting up 5 pilot projects for the time being.

(6) Not all of this renewable energy potential may be suitable for grid-interactive power for technical and/or economic reasons. Further, estimate excludes potential for solar power, which is dependent on future developments that might make solar technology cost-competitive for grid-interactive power generation applications.

Statement-III

State-wise details of cumulative achievements under different renewable energy programmes as on 30.09.2007

A. Grid connected Renewable Power

Sl.No.	States/UT	Small Hydro Power (MW)	Wind Power (MW)	Bio Power		Solar Power (MW)	Total Capacity (MW)
				Biomass Power (MW)	Waste to Energy (MW)		
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	179.10	122.40	334.25	32.00	0.10	667.85
2.	Arunachal Pradesh	45.24				0.02	45.26
3.	Assam	2.11					2.11
4.	Bihar	50.40					50.40
5.	Chhattisgarh	18.05		130.80			148.85
6.	Goa	0.05					0.05
7.	Gujarat	7.00	806.00	0.50	0.50		814.00
8.	Haryana	62.70		6.00			68.70
9.	Himachal Pradesh	141.61					141.61
10.	Jammu & Kashmir	111.83					111.83
11.	Jharkhand	4.05					4.05
12.	Karnataka	442.00	853.20	262.28	1.00		1558.48
13.	Kerala	98.12	2.00			0.02	100.14
14.	Madhya Pradesh	51.16	57.30	1.00	2.75	0.10	112.31
15.	Maharashtra	209.33	1622.20	95.50	1.00		1928.03
16.	Manipur	5.45					5.45
17.	Meghalaya	31.03					31.03
18.	Mizoram	17.47					17.47

19. Nagaland	28.67					28.67
20. Orissa	7.30	3.20				10.50
21. Punjab	123.90		28.00	9.25	0.32	161.47
22. Rajasthan	23.85	493.90	23.30		0.15	541.20
23. Sikkim	39.11					39.11
24. Tamil Nadu	89.70	3698.90	227.50	4.25	0.05	4020.40
25. Tripura	16.01					16.01
26. Uttar Pradesh	25.10		143.50	5.00	0.38	173.98
27. Uttaranchal	80.67				0.05	80.72
28. West Bengal	98.40	1.10			0.05	99.55
29. Andaman & Nicobar	5.25				0.10	5.35
30. Chandigarh						
31. Dadar & Nagar Haveli						
32. Daman & Diu						
33. Delhi						
34. Lakshawdeep					0.76	0.76
35. Pondicherry				0.02	0.02	0.02
TOTAL (MW)	2014.66	7660.20	1252.63	55.75	2.12	10985.36

MW = megawatt

Sl. No.	State/UT	Biogas Plants	Biomass Gasifiers	Waste to Energy Plants	Solar Photovoltaic Systems				SPV Pumps	Water Pumping Wind Mills	Aerogen/ Hybrid systems	Solar Cookers	Remote Village Electrification Villages/ Hamlets
					SLS	HLS	SL	P P					
		(Nos.)	(MW)	(MW)	(Nos.)	(Nos.)	(Nos.)	kWp	(Nos.)	(Nos.)	(kW)	(Nos.)	(Nos.)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Andhra Pradesh	421385	15.88	4.70	4044	1642	32982	26.16	613	6	16.00	13182	
2.	Arunachal Pradesh	2345	1.98		921	2330	9937	7.90	1			530	222
3.	Assam	59942	0.12		98	5420	541	9.00	45	3	6.00	80	55
4	Bihar	125306	0.02		955	2771	44649	0.00	139	46		475	
5.	Chhattisgarh	23399	0.51		535	4573	848	0.00	61			37114	325
6.	Goa	3807	0.02		313	273	443	1.72	15		39.20	1500	
7.	Gujarat	384251	15.21	2.95	2004	5918	31603	29.90	85	715	10.00	128719	38
8.	Haryana	50393	1.40		3091	22649	32727	224.20	469			26782	45
9.	Himachal Pradesh	45046	0.01		2919	16848	20697	1.50	6			28837	1
10.	Jammu & Kashmir	2212	0.52		389	18849	20963	175.60	39			368	117
11.	Jharkhand	2543	0.18		485	3933	0	0.00				280	348
12.	Karnataka	394099	6.42		2694	23174	7334	29.41	456	25	9.95	254	16
13.	Kerala	114183	0.73		815	8689	40681	44.70	810	79	8.00	236	558
14.	Madhya Pradesh	259943	6.50		6054	1307	8564	22.40	87			141618	33
15.	Maharashtra	739824	5.97	1.76	4166	1381	8680	6.44	228	26	457.62	58044	120
16.	Manipur	2128			490	3500	4787	11.00	12			365	134
17.	Meghalaya	4586	0.25		693	4740	24875	4200	19			1165	25
18.	Mizoram	3570	0.20		315	3045	5812	109.00	37			110	20
19.	Nagaland	2892	0.78		271	143	95	6.00					3
20.	Orissa	228295	0.27	0.03	5820	4234	7823	36.52	8			3437	18

21. Punjab	83881	0.70	1.58	2937	4270	14495	71.00	1821			22050	
22. Rajasthan	66990	1.07		6554	50551	4716	25.80	283	222	4.00	36683	218
23. Sikkim	6034	0.00		162	1805	720	16.70			10.00	20	13
24. Tamil Nadu	211564	6.46	2.98	2672	471	16086	30.05	829	56	24.50	1537	
25. Tripura	2549	1.10		760	2800	17805	24.57	25			80	236
26. Uttar Pradesh	410682	5.35	5.73	856	57138	52815	129.20	751			50134	20
27. Uttaranchal	7491			964	48265	56523	80.03	26			8534	430
28. West Bengal	279007	13.55		2111	37541	3662	675.00	48		18.00	7959	1173
29. Andaman & Nicobar	137	0.17		358	405	6296	167.00	5	2		60	
30. Chandigarh	97			0	275	1675	0.00	12			1529	
31. Dadar & Nagar Haveli	169			0	0	0	0.00				80	
32. Daman & Diu				0	0	0	0.00					
33. Delhi	677	0.07		301	0	4753	34.00	89			27990	
34. Lakshadweep				0	0	85.00						
35. Pondicherry	573	0.60		87	13	1637	0.00	21		5.00	90	
36. Others*		0.50	0.48	6487	24446	79707	58.00				16750	
TOTAL	3940000	86.53	20.21	61321	363399	564931	2179.80	7068	1180	608.27	616592	4168

SLS = Street Lighting System; HLS = Home Lighting System; SL = Solar Lanterns; SPV = Solar Photovaltaic; MW=Mega Watt; kWp=kilowatt peak

*Installed through NGOs/IREDA in different States/UTs